

Douglas County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/8/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 22 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Douglas County economy.¹

These 22 sectors have a total direct output of approximately **\$390.8 million** and support **1,848 jobs** in Douglas County. Running the model for all 22 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Douglas County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	1847.6	2.25%	\$107,120,537	2.14%	\$390,836,476	7.82%
Indirect Effect	489.8	0.60%	\$30,804,574	0.62%	\$61,490,527	1.23%
Induced Effect	369.2	0.45%	\$23,982,099	0.48%	\$41,838,177	0.84%
Total Effect	2706.6	3.30%	\$161,907,209	3.24%	\$494,165,180	9.88%

As shown in the above table, agriculture, food, and food processing sectors support **2,707 jobs**, or **3.30%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$494.2 million**, roughly **9.88% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 22 agriculture, food, and food processing sectors is approximately **\$161.9 million**, or **3.24% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **3.24% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **511 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Douglas County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	511.0	\$18,864,253
Landscape and horticultural services	455.0	\$23,873,238
Veterinary services	183.2	\$18,726,983
Dog and cat food manufacturing	157.5	\$246,559,970
Wholesale trade	110.8	\$18,022,666
Bread and bakery product, except frozen, manufacturing	108.9	\$12,791,989
Grain farming	96.4	\$11,431,260
All other crop farming	92.8	\$2,296,675
Support activities for agriculture and forestry	68.8	\$2,108,007
Oilseed farming	53.8	\$18,237,240

The dog and cat food manufacturing sector directly contributes approximately **\$246.6 million** to the Douglas County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Dog and cat food manufacturing	157.5	\$246,559,970
Landscape and horticultural services	455.0	\$23,873,238
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	511.0	\$18,864,253
Veterinary services	183.2	\$18,726,983
Oilseed farming	53.8	\$18,237,240
Wholesale trade	110.8	\$18,022,666
Bread and bakery product, except frozen, manufacturing	108.9	\$12,791,989
Frozen specialties manufacturing	30.6	\$11,547,735
Grain farming	96.4	\$11,431,260
Dehydrated food products manufacturing	19.2	\$9,341,608

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Douglas County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	53.8	\$18,237,240.14
Grain farming	96.4	\$11,431,260.30
Vegetable and melon farming	7.2	\$761,301.65
Fruit farming	29.8	\$1,441,497.71
Tree nut farming	1.2	\$84,681.88
Greenhouse, nursery, and floriculture production	22.5	\$1,814,492.26
All other crop farming	92.8	\$2,296,674.53
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	511.0	\$18,864,252.96
Dairy cattle and milk production	4.3	\$896,942.12
Poultry and egg production	5.5	\$2,061,288.21
Animal production, except cattle and poultry and eggs	37.2	\$1,590,805.37
Commercial logging	1.8	\$78,576.09
Commercial hunting and trapping	6.0	\$55,648.61
Dog and cat food manufacturing	157.5	\$246,559,970.33
Frozen specialties manufacturing	30.6	\$11,547,735.01
Dehydrated food products manufacturing	19.2	\$9,341,607.88
Bread and bakery product, except frozen, manufacturing	108.9	\$12,791,989.23
Frozen cakes and other pastries manufacturing	6.3	\$1,001,017.80
Cookie and cracker manufacturing	16.5	\$4,861,541.23
All other food manufacturing	8.6	\$2,922,218.72
Veterinary services	183.2	\$18,726,983.02
Landscape and horticultural services	455.0	\$23,873,238.01

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Douglas County, the retail sector was omitted.